It is of prime importance that both sections should work together to devise a solution of this problem. All must maintain an attitude of sincerity and absolute fair dealing on a basis of protecting the profession at large. The blame for this utter confusion cannot be placed entirely upon the insurance companies. A communication received from the medical director of the State Accident Industrial Commission implies that insurance companies have never been supplied with a list of properly qualified surgeons by the County Units, nor have adequate means for securing prompt service of physicians been provided. Thus it is that more diligence must be exercised to see that everything is done to obviate the impression of negligence.

Nothing is more productive of bad feeling in the profession than to have one group set themselves up as superior and exclusive practitioners, using their attainments to monopolize certain lines of practice to the exclusion of others who naturally resent this lack of appreciation of our common interests as embodied by our State membership organization.

The man who assumes that he alone, with a few others in each unit, is the only one competent to do any special line of work is presumptious, disloyal and a discredit to the splendid traditions of organized medicine.

To anyone who has watched the trend of political affairs, it is quite evident that a day of trial for the medical profession is at hand. Only by maintaining our high standards of professional character can we promote the stimulus which will excite the rank and file of our profession to present a solid front to the enemies which seek to debase our standards. Our industrial friends cannot escape by enacting one rule for insurance work and another for civil. The majority of our members have registered dissatisfaction with present conditions and delay in securing relief is only occasioned by lack of concert and State-wide consultation to decide what shall be the remedy for this deplorable condition.

To this end, an exact definition of measures to protect the rights of all are enumerated and repeated to refresh the minds of everyone concerned:

1. Each County Unit should select or nominate the men competent to do this work, general practitioners, surgeons and consultants. This group should include the men definitely used by insurance companies and should be controlled by a committee whose function is to pass on qualifications and protect physicians and carriers alike. The incompetent should be removed and remain removed until proven otherwise. This takes the control of our practice from insurance companies and insurance doctors and places it where it rightly belongs, namely, with the medical profession.

2. The privilege should be accorded every injured individual or his employer to call his personal surgeon, provided he is on the County Unit list of industrial surgeons.

3. The State Society should secure the enforcements of the intention of the law that the privileges of the Industrial Act should be limited to individuals of moderate income.

4. The State Society and is component units should have fair and unbiased interpretation of the law from its own legal staff, and where the rights of our memberships are not protected, should take the proper steps to secure legislative amendments.

5. No member should undertake this work for less than the fee schedule nor accept employment with any firms indulging in this pernicious practice.

6. No member should employ on salary men who are not members of the County Society. Applications pending should be considered as membership.

7. Officers of the Society and County Units known as representing insurance companies should be made to understand a proper appreciation of the delicacy of their positions and prevented from using them for the material benefit of themselves or their companies.

8. All the rules of courtesy and ethics that have heretofore applied to the practice of medicine and surgery should hereinafter also apply to the daily life of industrial surgeons.

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## ACUTE LYMPHATIC LEUKEMIA WITH SPECIAL REFERENCE TO THROAT CONDITIONS—REPORT OF A CASE

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Acute lymphatic leukemia is a disease not fully understood.

Hewlett in "Monographic Medicine," [1] defines it as follows: "A diffuse, unrestrained growth of the tissues that give rise to the white blood cells. The disease is really in the blood-forming organs, and lasts from one to nine weeks." A very indefinite definition.

The chronic form, with its anemia, glandular changes and characteristic blood findings, is not often overlooked, but the acute type, which runs its course with speed and extreme virulence, simulating or complicating other and more common diseases, is rare and more apt to be passed over.

The literature is scant on this subject. Most of the reported cases seem to be complicated with some other affection.

Monroe [2] reports a case simulating meningitis, and Samson [3] reports one complicated with noma in a child where the symptoms of leukemia disappeared during the onset of the noma, but later returned.

The etiology is uncertain. Two theories are possible:

1. Malignancy, based on the fact that in this disease we assume an unrestrained growth of certain cells in the body, but differing from the ordinary neoplasm in the fact that there seems to be no one definite focus. The pathology includes all the tissues concerned with the formation of white blood cells.

2. Infection, supported by the fact that the progress of the disease, with high fever, prostration and hemorrhagic tendencies, is similar to other diseases of infective origin. The nature of the infection, if such be the case, has not been discovered. However, Ellerman and Bong [4] have succeeded in transmitting chicken leukemia to normal fowls, and they note the interesting fact that some of the animals inoculated developed the myeloid form, while others showed the lymphatic type. They consider the cause a filterable virus. Ziegler and Jochmann [5] report several cases due to tonsil infection, and Hausemann suggests that many of its manifestations resemble those of severe diphtheria and other septic diseases.

The symptoms are usually well defined. The onset is fairly sudden, often starting with a chill, followed by fever, which soon becomes high and of a septic nature. The throat frequently shows evidence of early active inflammation, to such an extent that the case may be easily mistaken for a severe tonsillitis or peritonsillar abscess. Stomatitis is common. Hemorrhage from the gums, into the bladder and other areas, often occurs. The cervical glands enlarge early in the disease, but the swelling is not extreme. The spleen may not even be palpable, also no evidence of disease may be found in the long bones. Anemia and prostration are always present. Cardiac weakness comes on early, and the disease is invariably fatal in from a few days to a few weeks.

The diagnosis hinges on the blood picture which quickly develops, rapid changes taking place daily. Without the blood-cell relationship, the diagnosis is difficult and often impossible. Acute miliary tuberculosis, acute pyemia, acute follicular tonsillitis, acute peritonsillar abscess and, in fact, any acute inflammatory disease may be easily mistaken for acute leukemia, especially those diseases having a severe throat infection.

Examination of the blood gives the diagnosis at once, and while the leucocytosis is increasing by leaps and bounds, the change in the character and relationship of the white cells is one of the earliest features, and cannot fail to call one's attention to the nature of the disease. As has been said, more mistakes occur by not making a thorough examination than by not knowing, and this is especially true in the diagnosis of this disease. Blood counts show a leucocytosis running to 500,000 or over per cu. mm. with large and small lymphocytes above 80 per cent. In the lymphatic type myelocytes are rarely present, and polymorphonuclears are less than 5 per cent. Transitional cells are common, so much so that it has been suggested that the different types of leukemia may be but varieties or different stages of the same disease.

Treatment of any kind is only palliative, for, as Greene [7] says, "the disease is invariably fatal in a very brief time." Cases of the sub-acute and chronic type have been treated with Fowler's solution, benzol, X-rays and radium, and removal of the spleen in Banti's disease with but slightly better results.

Case No. 6684. J. O. The patient, a male, age twenty, had been apparently well up to one week previous, when he complained of sore throat. He had a small ulcer on his tongue, which he had been treating with a gargle. Family history was good. Past history, noted the usual childhood diseases, but nothing of importance for past ten years, except attacks of tonsillitis twice a year. Present examination showed patient fairly well nourished, but of sallow complexion and pale, and with very large, cryptic tonsils. Temperature, 104°. Pulse, 120. Right cervical glands somewhat swollen and tender. Glands elsewhere negative. Spleen not palpable. Lungs, heart and abdomen negative. Reflexes normal. Considerable blood was oozing from the throat, and the patient could open his mouth with difficulty. Tonsils were enlarged and right peritonsillar region swollen and hemorrhagic, with dark purpuric areas extending well over the vault, and out along the gums. The physician in charge had been in attendance the past two days, and stated that the throat looked typical of a peritonsillar abscess. He so diagnosed and, acting on this assumption, had incised deeply in the region of the swelling, but got no pus. He then, to make sure, probed at different angles, feeling that with this kind of throat and temperature pus must be present somewhere in the locality, but found none. The following day hemorrhagic areas developed, and the bleeding from the incision continued fairly profuse. After two days of continuous bleeding, we saw the case in consultation. In spite of loss of blood and high temperature, the boy said he felt good and was hungry. However, he looked very sick.

Our diagnosis of acute leukemia was made on the laboratory findings. Hemoglobin, 68 per cent. Erythrocytes, 2,760,000. Leucocytes, 33,800. Small lymphocytes, 26½ per cent. Large lymphocytes, 67 per cent. Polymorphonuclears, 1 per cent. Transitionals, 5½ per cent. Later the same day the white count went to 38,000, the percentages remaining about the same. By the following morning the white count was 125,000 with large and small leucocytes together, 94 per cent, polynuclears, 1 per cent, and transitionals, 5 per cent.

Realizing the hopelessness of the situation, yet anxious to check the hemorrhage, we gave 1 cc. of hemoplastin intravenously. In a few hours the bleeding from the throat incision stopped, but later the same day epistaxis began and the urine was quite red in color. This condition was partially controlled by a second injection of hemoplastin, but the pulse became faster and weaker, and the second day the patient died.

## CONCLUSIONS

1. Acute lymphatic leukemia, while a rare disease, must not be overlooked when considering severe throat conditions.

2. The laboratory is absolutely essential in differentiating the various blood diseases, and though the case looks simple, unless emergency demands immediate action, the best practice calls for the taking of clotting time and complete blood and urine tests before any diagnosis is made, and especially before any surgical procedure of the throat or anywhere else is decided upon.

1. Hewlett—Monographic Medicine, Vol. I, p. 617.
2. Monroe—Journal A. M. A., Vol. 74, No. 9, p. 603.
3. Samson—Berl. Klin Noch., Feb. 3, 1908.
4. Ellermoun (V) Untersuchungen Uber das Voins der Buhnerleukamia. Z Bchr. f. Klin. Med., 1914, LXXIX, 43.
5. Zeigler and Jochmann—Deut. Med. Woch., XXXIII, No. 19.
6. Hausemann—Berl. Klin. Woch., Jan. 5, 1914.
7. Greene—Medical Diagnosis, p. 157.